



Department of Energy

Nevada Operations Office

February 19, 1988

David R. Anderson
Wilmer, Cutler & Pickering
2445 M Street, NW
Washington, DC 20037-1420

Dear David:

Attached is our most recent report on the Runit Dome. Our evaluation is that the structural integrity of the dome is not impaired. There are no radiation leaks through the dome nor do we expect there will be.

Sincerely,

for Inette M. Hall
Harry U. Brown
Deputy Program Manager
Office of Emergency Response
and Planning Analysis

Enclosure:
As stated

bcc:
J. H. Dryden, Dir., PASO

Runit

HARRY BROWN'S Files, NV

H53

Harry's Copy



HOLMES & NARVER, INC.

ENERGY SUPPORT DIVISION
PACIFIC OPERATIONS

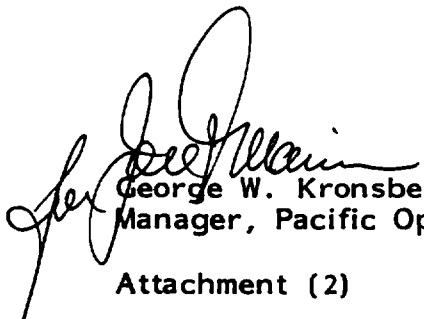
September 14, 1987

DATE:	A	I	DATE
J. H. DRYDEN			
C. E. SCHRYER			9/9/87
W. D. JACKSON			9/12/87
S. J. BOLLING			
G. M. MATSUOKA			
A/MOCO			
H&N/PO/			
OTHER Received			2 days 9/14
1-BG Kavanaugh			9/15/87

Mr. J. H. Dryden, Director
Pacific Area Support Office
U.S. Department of Energy
P.O. Box 29939
Honolulu, HI 96820

STRUCTURAL MONITORING OF CACTUS CRATER STORAGE FACILITY (RUNIT DOME)

Attached is the report on the Structuring Monitoring
of Cactus Crater Storage Facility (Runit Dome) prepared
by Kent Hiner through a field survey on August 1, 1987.


George W. Kronsbein
Manager, Pacific Operations
Attachment (2)



HOLMES & NARVER, INC.

ENERGY SUPPORT DIVISION
PACIFIC OPERATIONS

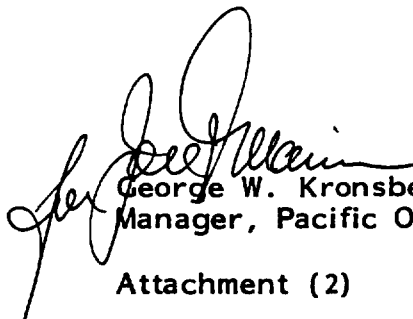
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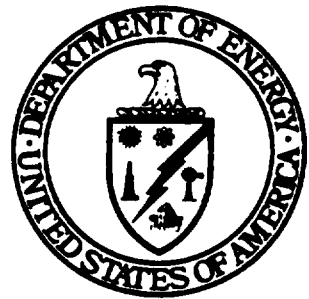

George W. Kronsbein
Manager, Pacific Operations
Attachment (2)

STRUCTURAL MONITORING
OF
CACTUS CRATER STORAGE FACILITY
(RUNIT DOME)

FIELD SURVEY AUGUST 1, 1987



HOLMES & NARVER, INC.
ESD/PACIFIC OPERATIONS



PACIFIC AREA SUPPORT OFFICE

STRUCTURAL MONITORING
OF
CACTUS CRATER STORAGE FACILITY
(RUNIT DOME)

FIELD SURVEY AUGUST 1, 1987

RUNIT DOME SURVEY

OVERALL EVALUATION

There have been no major changes since last year's report. There is continuing surface spalling with the worst area being the joint between "A" row and the base. This factor has been consistent with each yearly report. The overall condition of the dome is excellent.

SECTION EVALUATION

"A" Row - This section is nearly covered with vegetation (1 thru 8) and is heaviest on the lagoon side and the island south. During the dry season this vegetation dries up and retreats, but every year it extends further up the dome. Pressure spalling has occurred at A2 (9) and A4 (10). There was additional spalling reported last year on this row which is not pictured for the mere fact it is minor and has not changed.

"B" Row - This section at B41 (11) has vegetation extending well into this area. The overall condition of this row is excellent. B52 (12) shows some minor disintegration at the seams which is typical for this row and others. B56 (13) shows extending vegetation. B57 (14 thru 15) shows some signs of surface disintegration for this specific panel*. B57 (16), B10 (17), B16 (18), and B24 (19) are remaining overviews of this row and its general excellent condition.

"C" Row - The overall condition of this row is excellent as reflected in views from C10 (20), C19 (21), C27 (22), C32 (23), and C47 (24). Minor problems exist at C12 (25) where core sample hole was patched, C16 (26) spalling, C38 (27) minor disintegration at seam.

"D" Row - The overall condition of this row is excellent as reflected in views from D1 (28), D11 (29), D26 (30), D30 (31) and D32 (32). Minor problems exist at D5 (33) core hole patch, D16 (34) surface disintegration of panel*, D22 (35) surface disintegration and spalling, D36 (36) horizontal crack across entire panel, D41 (37) jagged vertical crack down the entire panel, and D42 (38) spalling at seam.

"E" Row - The overall condition of this row is excellent as reflected in views from E4 (39), E11 (40), E18 (41),

E19 (42), E24 (43), and E35 (44). Minor problems exist at E8 (45) surface disintegration of panel*, E24 (46) horizontal crack, and E32 (47) jagged horizontal crack.

"F" Row - The overall condition of this row is excellent as reflected in views from F1 (48), F7 (49), F14 (50), F26 (51). Minor problem exist at F28 (52) spalling at seam and surface disintegration*.

"G" Row - The overall condition of this row is excellent as reflected in views from G1 (53), G9 (54), and G23 (55). Minor problem exist at G41 (56) diagonal crack on corner.

"H" Row - The overall condition of this row is excellent as reflected in views from H6 (57), H11 (58), and H20 (59). Minor problems exist at H11 (60) surface disintegration, H14 (61) spalling at seam.

"I", "J" and "Top" - The overall condition of these rows are excellent as reflected in photos (62), (63), (64), and (65).

* Panels which appear to have some surface disintegration are consistently inconsistent and are not a reflection of the dome as a whole. It appears these were results of improper composition of the original mix, possibly inclement weather or inexperienced crew. No matter what the cause the panels do not appear to have any structural weakness and their only problem is that they are "hard on the eye".

Prepared by:

Kent Hiner
Sr. Project Coordinator
Holmes & Narver, Inc. August 1, 1987